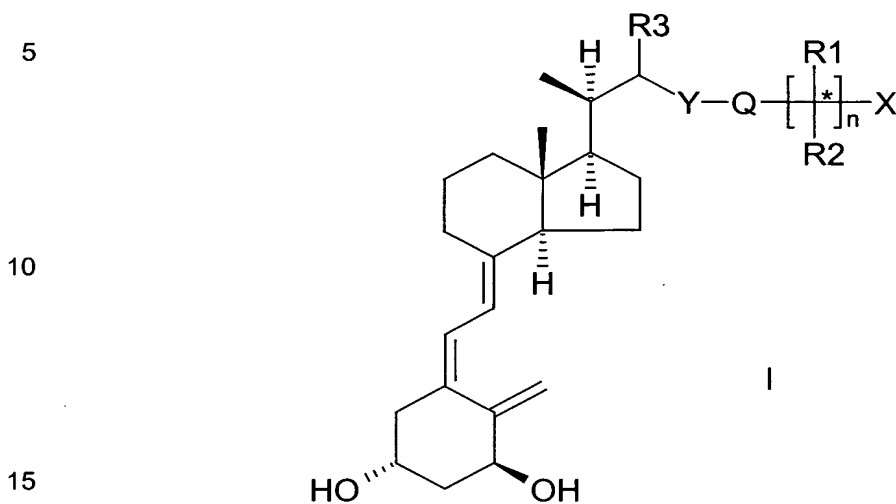


Abstract

Compounds of the formula I



wherein

20 X represents hydrogen or hydroxy;

Y represents oxygen or sulphur or oxidized sulphur selected from the groups S(O) and S(O<sub>2</sub>);

R<sup>1</sup> and R<sup>2</sup>, which may be the same or different, represent hydrogen or a residue after removal of 1 hydrogen atom from a straight, branched or cyclic, saturated or unsaturated, C<sub>1</sub>-C<sub>6</sub>-hydrocarbon; or R<sup>1</sup> and R<sup>2</sup>, together with the carbon atom to which they are attached (marked with an asterisk in formula I), bearing the group X, form a C<sub>3</sub>-C<sub>8</sub> carbocyclic ring;

Q represents a diradical residue after removal of 2 hydrogen atoms from a straight, branched or cyclic, saturated or unsaturated C<sub>1</sub>-C<sub>8</sub>-hydrocarbon;

R<sup>3</sup> represents hydrogen or a residue after removal of 1 hydrogen atom from a straight, branched or cyclic, saturated or unsaturated C<sub>1</sub>-C<sub>6</sub>-hydrocarbon;

R<sup>1</sup>, R<sup>2</sup> and/or Q is optionally substituted with one or more deuterium or fluorine atoms; and n is 0 or 1;

and derivatives of the compounds of formula I in which one or more hydroxy groups have been transformed into -O-acyl or -O-glycosyl groups, or a phosphate ester, such masked groups being hydrolyzable in vivo;

may be used for the preparation of a medicament for the treatment and/or prophylaxis of osteoporosis and related bone disorders.